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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,804	10/20/2008	Nathan Kane	JJTP-0039 / TPI5054USPCT	4853
45511 7590 04/01/2010 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER WEISZ, DAVID G	
			ART UNIT 1797	PAPER NUMBER
			NOTIFICATION DATE 04/01/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@woodcock.com

Office Action Summary	Application No. 10/599,804	Applicant(s) KANE ET AL.	
	Examiner DAVID WEISZ	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-36 and 38-47 is/are pending in the application.
- 4a) Of the above claim(s) 39-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-36, 38 and 44-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Acknowledgement is made of RCE and amendment filed 2/26/10. Upon entering the amendment, claims 27 and 38 are amended, claim 37 is canceled and claims 44-47 are new. Claims 27-36 and 38-47 are pending and claims 27-36, 38 and 44-47 are presented for examination.

Response to Amendment

2. In response to the amendment and the Applicants' remarks, the examiner modifies the grounds for rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. **Claims 27-30, 32-36, 38 and 44-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kane et al. (US 20040146434) (Kane) in view of Blanton et al. (US 20050136250) (Blanton).

Kane discloses a method of coring a solid using a core tool such that a plug is formed, extruding the plug (Figure 5), and performing powder x-ray diffraction analysis on the sample [0138] (*claim 27 and 38*). The reference additionally discloses that the material is compressed after the plug is formed (See Claim 4) (*claim 28*). The reference additionally discloses loading said coring tool onto a rack after the material is extruded, wherein the rack has a plate with one or more holes [0157] (*claim 29-30*). The reference additionally discloses a pin is used to extrude the plug [0121]. The reference additionally discloses the use of a micrometer to adjust the plug size [0108] (*claim 33*). The reference additionally discloses the plate to be adjustable [0157] (*claim 34*). The reference additionally discloses that radiation can be x-ray or infrared [0138] (*claims 35-36 and 46-47*). The reference additionally discloses a sample dispersion method involving a two-dimensional array of holes [0157]. One having ordinary skill in the art would adjust the number of holes in a number of ways to ensure that a desired number of samples were achieved (*claim 44*). The reference additionally discloses that the method is automated [0157] (*claim 45*). However, the reference does not specifically disclose the angle of incidence to be less than 2.5 degrees for x-ray radiation as disclosed in claims 27 and 38.

Blanton discloses a method of x-ray powder diffraction [0039]. The reference discloses that such a method is usually carried out at small angles of incidence, at a range of 1-10 degree diffraction double angles [0039]. One having ordinary skill in the art would apply these angles of incidence to the method of Kane, powder x-ray diffraction is a preferred method of analysis (*claims 27 and 38*).

7. **Claim 31** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kane in view Blanton, as applied to claims 27-30, 32-36, 38 and 44-47 above, in view of Appleby et al (US 7410606) (Appleby).

Regarding claim 31, Kane-Blanton do not specifically disclose the method wherein the top plate of the rack absorbs radiation.

Appleby discloses properties of x-ray detection grids, which are capable of absorbing x-rays to reduce the effects of scattered x-rays (*Col31/L4-12*) (*claim 31*). It would have been

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obvious to one having ordinary skill in the art to include x-ray absorbing qualities to the properties of the rack in Kane-Blanton because it reduces the effects of scattered x-rays.

Response to Arguments

8. Applicant's arguments with respect to claim 27-36, 38 and 44-47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID WEISZ whose telephone number is (571)270-7073. The examiner can normally be reached on Monday - Thursday, 7:30 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/29/2010

/Yelena G. Gakh/
Primary Examiner, Art Unit 1797

/D. W./
Examiner, Art Unit 1797